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Attorney Docket No. RANPP0348USA

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re PATENT application of:

Applicant:	Harry H. Lu
Application No.:	10/702,225
Filing Date:	November 5, 2003
Title:	DUNNAGE CONVERTER WITH COILER AND MECHANICAL SECUREMENT DEVICE
Examiner:	Eugene Lee Kim
Art Unit:	3721

APPEAL BRIEF

MS Appeal
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

This brief is submitted in support of the appeal of the decision of the Examiner mailed July 14, 2005, finally rejecting claims 1, 3-9 and 23 of the above-identified application.

I. Real Party in Interest

The real party in interest in the present appeal is the assignee, Ranpak Corp.

II. Related Appeals and Interferences

Appellant, appellant's legal representatives, and/or the assignee of the present application are unaware of any appeals or interferences which will directly affect, which will be directly affected by, or which will have a bearing on the Board's decision in the pending appeal.

III. Status of Claims

Claims 1, 3-9 and 23 are pending and stand finally rejected. Claims 10-22 have been canceled. A copy of the claims is attached as Appendix A.

IV. Status of Amendments

An amendment made after final has been entered, but according to the Examiner did not place the application in condition for allowance.

V. Background

In the process of packaging one or more objects for shipping, a protective packaging material typically is placed in the shipping container to fill any void and/or to cushion the objects. Converted paper dunnage material is an exemplary protective packaging material. The conversion may be accomplished by a cushioning conversion machine, such as a type that typically causes inward turning of the lateral edges of sheet stock material to form a continuous strip of cushioning.

For some applications, particularly when blocking or bracing a relatively large and/or heavy item during shipping, the strip of cushioning may be "wound up" into a coil configuration. The coiled cushioning product might then be placed in the shipping container and the large/heavy item placed thereon. Systems for automatically coiling a strip of dunnage, and thereby forming a more consistent coil of cushioning dunnage are known.

VI. Summary of Claimed Subject Matter

In accordance with claim 1, the present invention provides a system (10) that comprises a dunnage supply (12) having a converter (30) that is operable to convert a

sheet stock material into a strip of relatively less dense dunnage (20). The dunnage supply (12) has an outlet through which one or more of the strips of dunnage are supplied.

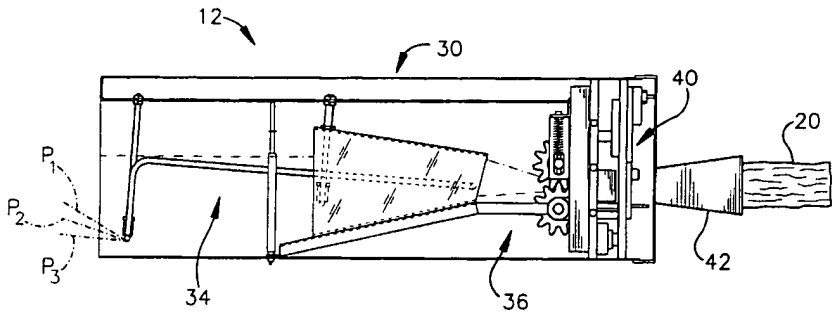

Fig.3

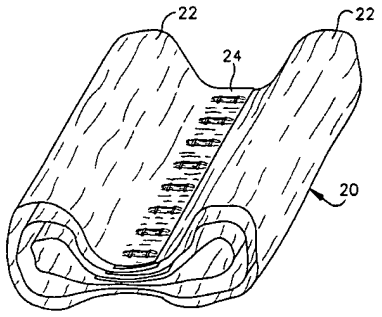

Fig.2

The system (10) also comprises a positioning device (14) that positions in juxtaposition portions of the one or more strips of dunnage, and a stapler (16) for connecting the juxtaposed portions to hold them together.

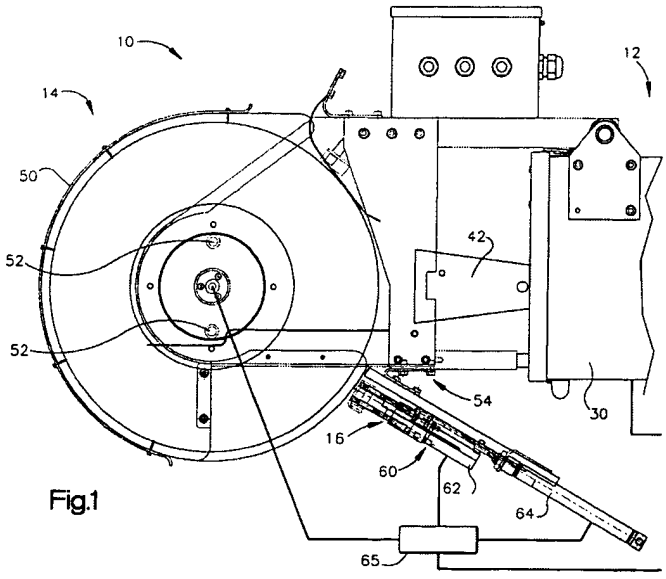

Fig.1

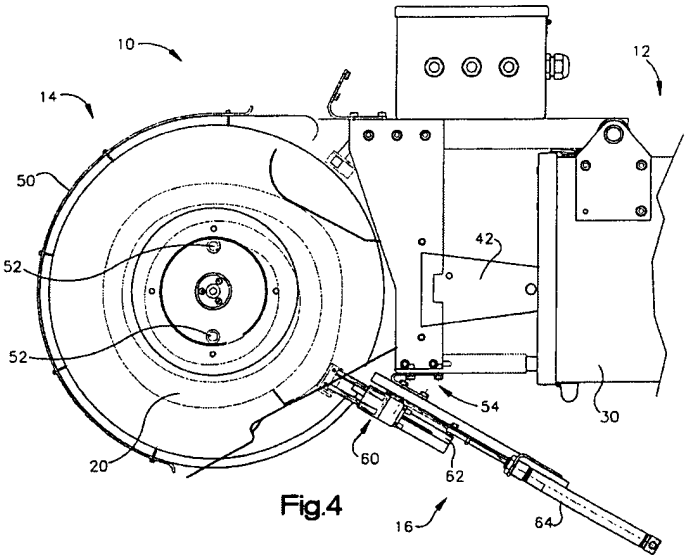

Fig.4

Claim 4 further limits claim 1 to a positioning device (14) that includes a coiler (50) operable to roll the strip of dunnage (20) into a coil. The stapler (16) is operable to connect a trailing end portion of the strip of dunnage to an adjacent, next-innermost portion of the coil.

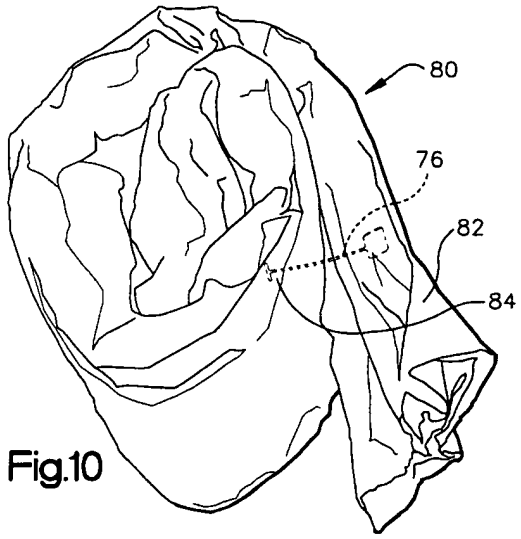

Fig.10

See FIGS. 1-4 and 10; and specification p. 5, lines 7-12, 20-23, and p. 5, line 31 through p. 6, line 1, and p. 6 lines 7-9.

VII. Grounds of Rejection to be Reviewed on Appeal

(1) Whether claim 1, and claims 3, 5, 6 and 7 which depend therefrom, were properly rejected as being anticipated under 35 U.S.C. § 102(b) by U.S. Patent No. 5,468,556 to Fuss, et al. (referred to herein as "Fuss") or as being unpatentable under 35 U.S.C. § 103(a) in view of Fuss; and

(3) Whether claim 4, and claims 8, 9 and 23 which depend therefrom, were properly rejected as being unpatentable under 35 U.S.C. § 103(a) in view of Fuss and further in view of U.S. Patent No. 6,251,054 to Cruz, et al. (referred to herein as "Cruz") or U.S. Patent No. 5,643,647 to Wischusen, III (referred to herein as "Wishchusen").

VIII. Argument

The Examiner's rejections were improper and should be reversed for the following reasons. First (1), in construing the claims the Examiner improperly ignored functional limitations that limit the structural elements of the claims. And second (2),

when the claims are properly construed, the applied references fail to teach or suggest all of the elements of the claims.

(**1**) In construing the claims, the Examiner has taken the position that the functional language in the claims referring to the strips of dunnage are irrelevant in an apparatus claim (Paper No./Mail Date 06232005, p. 3). In particular, the Examiner contends that the order in which the strip of dunnage is acted upon does not have to be considered since he only needs to evaluate the structural limitations of the apparatus claims. Nevertheless, the Examiner also has taken the position that Fuss reads on both the claimed structural limitations and the positioning function of the claimed positioning device. (See Paper No. 09262005, continuation sheet; Paper No. 06232005, p. 2; and Paper No. 04142005, p. 3.)

The functional language, however, defines the particular capabilities or purpose that is served by the recited structural elements and therefore is proper and must be considered by the Examiner in construing the claims. MPEP 2173.05 (g). Within the scope of claim 1, the positioning device cannot juxtapose portions of one or more strips of dunnage, for example, unless the positioning device is located downstream of the dunnage converter. Likewise, the position of the stapler is restricted by the functional language referring to the stapler connecting the juxtaposed portions to hold them together. The stapler must be in a position to connect the juxtaposed portions after they are so positioned by the positioning device. Thus this functional language should not be ignored but must be considered in interpreting the scope of the claims.

(**2**) Properly construed, the claims are neither anticipated by nor unpatentable over Fuss or Fuss in view of Cruz or Wischusen because these references fail to teach or suggest all of the claim limitations.

Fuss discloses a system and method for making shaped loose-fill packaging particles 20 from a sheet material 60 such as paperboard, chipboard, kraft paper, polymeric materials, etc. (See Fuss, column 3, lines 7-9.) Flat planar bands or strips 96 of the sheet material are cut (FIGS. 12, 15 and 16, e.g.) and formed into convoluted

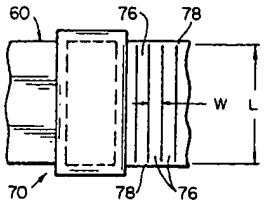

FIG_12

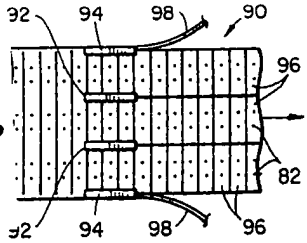

FIG_16

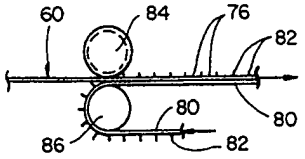

FIG_15

non-planar-shape particles 20 (FIGS. 18-20, e.g.). (See Fuss, column 7, lines 15-21.)

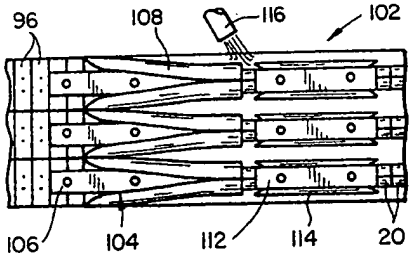

FIG_18

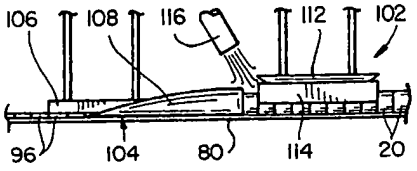

FIG_19

In the forming process, end regions 34 and 36 of each strip 96 are joined together with an adhesive 39 or by stapling to complete the non-planar-shape loose-fill packaging particle 20. (See Fuss, column 2, lines 34-41.)

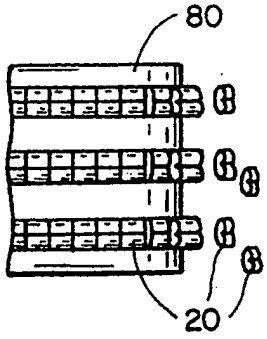

FIG_20

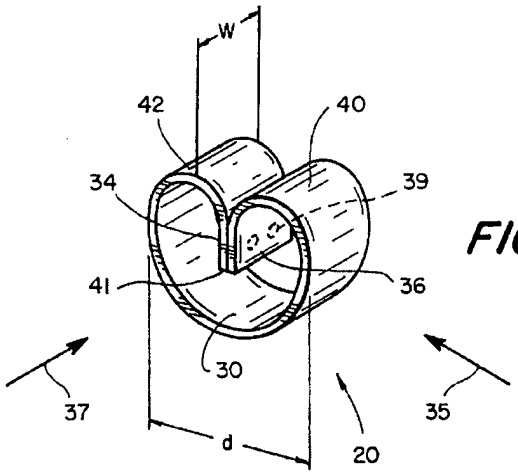

FIG_2

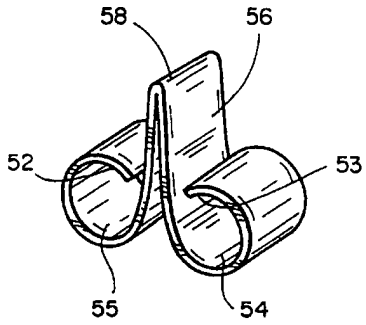

FIG_9

While admittedly Fuss discloses a converter that is operable to convert a sheet stock material 60 into a relatively less dense dunnage product 20, it is respectfully submitted that Fuss does not include the claimed positioning device or the claimed stapler.

Recall that claim 1 generally includes a converter that is operable to convert a sheet stock material into a strip of relatively less dense dunnage, a positioning device that positions in juxtaposition portions of one or more strips, and a stapler for connecting the juxtaposed portions to hold them together.

The Examiner has taken the position that (1) just the portion of the machine disclosed in Fuss that forms the planar strips 96 reads on the claimed converter (see FIGS. 12, 15 and 16, above, e.g.), (2) the portion of the machine that turns the strips (at about 104 in FIGS. 18 and 19, e.g.) reads on the claimed positioning device, and (3) the portion of the machine that joins the ends of the strips together (at about 112 and 114 in FIGS. 18 and 19, e.g.) reads on the claimed stapler. Unlike the strips of dunnage produced by the claimed converter, however, Fuss's planar strips 96 are not less dense than the stock material 60 from which they were formed. Fuss's machine doesn't produce a relatively less dense dunnage product until the ends of the strips 96 are adhesively joined together to form the convoluted non-planar shape 20.

Once the convoluted non-planar shape 20 is formed, Fuss does not disclose or suggest a positioning device or a stapler that further acts upon the convoluted non-

planar shapes 20. Consequently Fuss neither anticipates claim 1 nor renders claim 1 unpatentable, and the rejection should be reversed.

Claim 4 depends from claim 1 and further defines the positioning device as a coiler that winds a strip of dunnage into a coil. The stapler then connects juxtaposed portions of the coiled strip. Fuss also does not teach or suggest a coiler operable to roll a convoluted non-planar shape particle 20 into a coil after the convoluted non-planar shape particle 20 is formed.

Neither Cruz nor Wischusen overcome these deficiencies in Fuss. Cruz discloses a stapler for binding printed sheets, such as a pamphlet. In particular, Cruz discloses a post-processing mechanism for a printer that has a curved paper path. Post-processing operations such as stapling or other binding are performed either within the curved path or during the withdrawal of a document from the curved path. (See Cruz, abstract and FIG. 1, stapler 51 to the left of the curved path.)

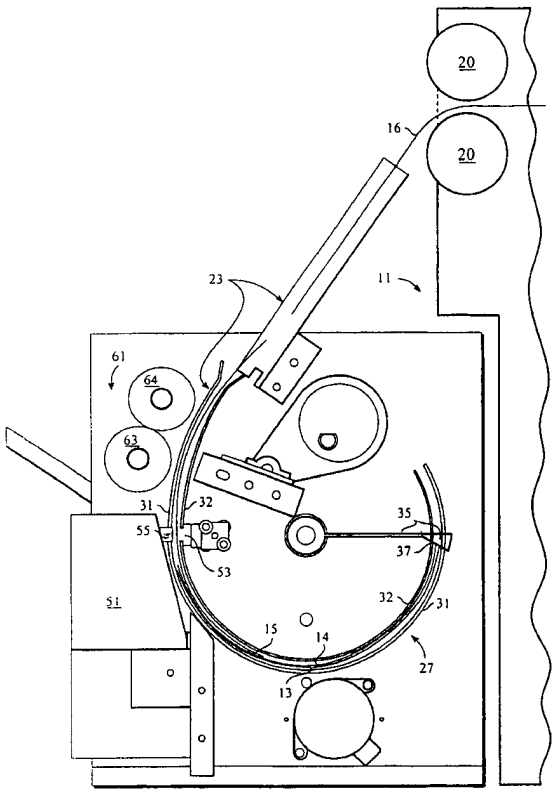

Fig. 1

Wischusen discloses another type of strip of paper formed into a loose-fill dunnage product, similar to Fuss's convoluted non-planar shape particle 20. Specifically, Wishchusen discloses a tubular dunnage element 10 with a tucked or heart-shaped radial cross section, a slanted axial cross section and a jagged edge. (See Wischusen, abstract and FIG. 1.)

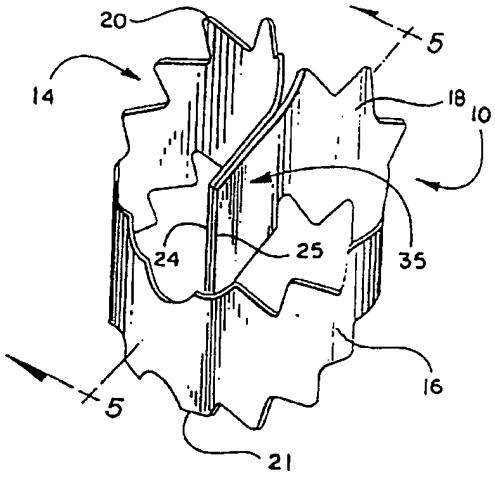

Fig. 1

It is respectfully submitted that neither reference provides any teaching or motivation for further acting on Fuss's convoluted non-planar shape particle 20 to roll it into a coil and then staple juxtaposed portions to hold it together. Reversal of the rejection is requested.

IX. Conclusion

In view of the foregoing, it is respectfully submitted that the claims are patentable over the applied art and that the final rejection should be reversed.

X. Fees

A credit card payment form is enclosed herewith for payment of the fees for filing this brief. No extension of time is believed to be necessary. However, if an extension of time is needed to make the filing of this paper timely and no separate petition is attached, please consider this a petition for the requisite extension. In the event any additional fee is due in connection with the filing of this paper, the Commissioner is authorized to charge those fees to our Deposit Account No. 18-0988 (under the above Docket Number).

Respectfully submitted,

RENNER, OTTO, BOISSELLE & SKLAR, L.L.P.

By: Christopher B. Jacobs

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CERTIFICATE OF MAILING

I hereby certify that this paper (along with any paper or item referred to as being attached or enclosed) is being deposited with the U.S. postal service on the date shown below with sufficient postage as first-class mail in an envelope addressed to MS Appeal, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

Date: 9 March 2006

Christopher B. Jacobs

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Appendix A
Claims on Appeal

1. (Previously Presented) A system, comprising a dunnage supply having a converter that is operable to convert a sheet stock material into a strip of relatively less dense dunnage, the dunnage supply having an outlet through which one or more of the strips of dunnage are supplied, a positioning device that positions in juxtaposition portions of the one or more strips of dunnage, and a stapler for connecting the juxtaposed portions to hold them together.

Claim 2 (Canceled)

3. (Original) A system as set forth in claim 1, wherein the positioning device juxtaposes longitudinally spaced portions of the same strip of dunnage.

4. (Original) A system as set forth in claim 1, wherein the positioning device includes a coiler operable to roll the strip of dunnage into a coil, and the stapler is operable to connect a trailing end portion of the strip of dunnage to an adjacent, next-innermost portion of the strip in the coil.

5. (Original) A system as set forth in claim 1, wherein the stapler is operable to insert at least one staple into the juxtaposed portions.

6. (Original) A system as set forth in claim 5, wherein the stapler is of a type that inserts a plastic staple.

7. (Original) A system as set forth in claim 1, wherein the stapler is configured for injecting a plastic staple having a cross-bar at one end through the strip of dunnage, the staple having a paddle at the opposite end for resisting passage through the strip of dunnage and an elongated filament interconnecting the cross-bar and the paddle.

8. (Original) A system as set forth in claim 1, wherein the stapler is operable to form a staple from at least one of the juxtaposed portions and to insert the staple into another of the juxtaposed portions to mechanically lock together the juxtaposed portions.

9. (Original) A system as set forth in claim 8, wherein the stapler is operable to form a tab in the strip of dunnage and to push the tab into the strip.

Claims 10-22 (Canceled)

23. (Previously Presented) A system as set forth in claim 9, wherein the tab has a c-shape with a hinge at one side and a width dimension parallel to the hinge that is greater than the width of the hinge.